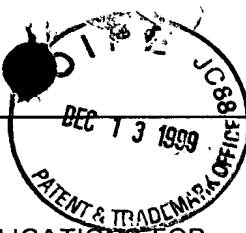


FORM PTO-1449 (Modified)



#7

ATTY. DOCKET NO.
24743-2302USSERIAL NO.
09/171,625LIST OF PATENTS AND PUBLICATIONS FOR
APPLICANT'S INFORMATION DISCLOSURE
STATEMENTAPPLICANT
KÖSTER, *et al.*FILING DATE
October 19, 1998GROUP
~~4632~~ 1627

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER							DATE	NAME	CLASS	SUB CLASS	FILING DATE
PP	A	5	1	4	3	8	5	4	09/01/92	Pirung et al.	436	518	03/07/90
PP	B	5	6	8	8	6	4	2	11/18/97	Chrissey et al.	435	6	12/01/94

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER							DATE	COUNTRY	CLASS	SUB CLASS	Translation Yes No	

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER

P. Ponnadurai

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2/22/01

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FORM PTO-1449 (Modified)

ATTY. DOCKET NO.
24743-2302US

SERIAL NO.
09/171,652

LIST OF PATENTS AND PUBLICATIONS FOR
APPLICANT'S INFORMATION DISCLOSURE
STATEMENT

APPLICANT
Köster *et al.*

FILING DATE
July 2, 1999

GROUP
1632

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER							DATE	NAME	CLASS	SUB CLASS	FILING DATE
pp	A	5	4	1	0	0	6	8	4/25/95	Coull <i>et al.</i>	548	545	10/23/89
	B	5	5	0	3	9	8	0	04/02/96	Cantor	435	6	10/17/94
	C	5	5	4	7	8	3	5	8/20/96	Köster	435	6	1/6/94
	D	5	5	8	2	9	8	1	12/10/96	Toole, <i>et al.</i>	435	6	4/28/94
	E	5	6	0	5	7	9	8	02/25/97	Koster	435	6	03/17/95
	F	5	6	2	2	8	2	4	04/2/97	Koster	435	6	02/10/95
	G	5	6	3	1	1	3	4	05/20/97	Cantor	435	6	06/05/95
	H	5	6	9	1	1	4	1	11/25/97	Koster	435	6	06/06/95
	I	5	7	7	7	3	2	4	07/07/98	Hillenkamp	250	288	09/19/96
	J	5	7	9	5	7	1	4	08/18/98	Cantor <i>et al.</i>	435	6	08/23/93
	K	5	8	5	1	7	6	5	12/22/98	Koster	435	6	05/30/95
	L	5	8	7	2	0	0	3	02/16/99	Koster	435	283.1	05/30/95
✓	M	5	9	0	0	0	3	6	05/04/99	Mossadegh <i>et al.</i>	65	384	08/30/96

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER							DATE	COUNTRY	CLASS	SUB CLASS	Translation Yes No	
pp	N	3	6	4	4	3	4	6	5/21/87	DE	A1		abstract	X
	O	8	5	0	4	6	7	4	10/24/85	PCT WIPO	C12F	19/34	✓	
	P	8	9	0	5	6	1	6	6/29/89	PCT WIPO	A61F	2/54	✓	
	Q	9	2	0	2	5	3	3	2/20/92	PCT WIPO	C07H	167	✓	
	R	9	5	0	3	3	1	5	2/2/95	PCT WIPO	C07H	3/06	✓	
	S	9	6	0	3	4	2	4	2/8/96	PCT WIPO	C07K	1/04	✓	
	T	9	7	4	1	1	3	9	11/6/97	PCT WIPO	C07H	19/06	✓	
✓	U	9	8	2	0	0	2	0	5/14/98	PCT WIPO	C07H	21/00	✓	

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	APPLICANT Köster <i>et al.</i>	
	FILING DATE July 2, 1999	GROUP 1632 -1627

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER							DATE	COUNTRY	CLASS	SUB CLASS	Translation Yes No	
	V	9	8	3	3	8	0	8	8/6/98	PGT <i>W 190</i>	C07H	21/00	<input checked="" type="checkbox"/>	

*Derwent English language abstract and/or English translation provided.

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

<i>pp</i>	W	Alper, J., Drug discovery on the assembly line, <i>Science</i> , 264:1399-1401 (1994).
	X	Amarnath, V., <i>et al.</i> , Chemical synthesis of oligonucleotides, <i>Chem. Rev.</i> , 77:183-217 (1977).
	Y	Archady, R., Beaded polymer supports and gels: II. Physico-chemical criteria and functionalization, <i>Journal of Chromatography</i> , 586:199-219 (1991).
	Z	Beaucage, S.L., <i>et al.</i> , The synthesis of modified oligonucleotides by the phosphoramidite approach and their applications, <i>Tetrahedron</i> , 49:6123-94 (1993).
	AA	Cohen, J.S., <i>et al.</i> , The new genetic medicines, <i>Scientific American, International Edition</i> , pp. 76-84 (December 1994).
	AB	Engels, J., Krankheit-Fehler in der Informationsübertragung, <i>Natur. Chem. Techn. Lab.</i> , 39:1250-54 (1991).
	AC	Froehler, B.C., <i>et al.</i> , Synthesis of DNA via deoxynucleoside H-phosphonate intermediates, <i>Nucleic Acids Res.</i> , 14:5399-5407 (1984).
	AD	Froehler, B.C., <i>et al.</i> , Nucleoside H-phosphonates: valuable intermediates in the synthesis of deoxyoligonucleotides, <i>Tetrahedron Lett.</i> , 27:469-72 (1986).
	AE	Garegg, P.J., <i>et al.</i> , Nucleoside H-phosphonates. III. Chemical Synthesis of oligodeoxyribonucleotides, <i>Tetrahedron Lett.</i> , 27:4051-54 (1986).
	AF	Gershon, P.D., <i>et al.</i> , Stable chelating linkage for reversible immobilization of oligohistidine tagged proteins in the BIAcore surface plasmon resonance detector, <i>Journal of Immunological Methods</i> , 183:65-76 (1995).
	AG	Gioeli, C., <i>et al.</i> , The fluoren-9-ylmethoxycarbonyl group for the protection of hydroxy-groups; Its application in the synthesis of an octathymidylic acid fragment, <i>J. Chem. Soc., Chem. Commun.</i> , 672-74 (1982).
<i>✓</i>	AH	Gordon, E.M., <i>et al.</i> , Applications of combinatorial technologies to drug discovery. 2. Combinatorial organic synthesis, library screening strategies, and future directions ¹ , <i>J. Med. Chem.</i> , 37:1385-1401 (1994).

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LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT	APPLICANT Köster <i>et al.</i>	
	FILING DATE July 2, 1999	GROUP 1632

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

PP	AI	Heikkila, J., <i>et al.</i> , The 2-nitrophenylsulfenyl (Nps) group for the protection of amino functions of cytidine, adenosine, guanoside and their 2'-deoxysugar derivatives, <i>Acta Chem. Scand.</i> , B37:857-64 (1983).
	AJ	Himmelsbach, F., <i>et al.</i> , The <i>p</i> -nitrophenylethyl (NPE) group: A versatile new blocking group for phosphate and aglycone protection in nucleosides and nucleotides, <i>Tetrahedron</i> , 40:59-72 (1984).
	AK	Hsiung, H.M., Improvements in the phosphotriester synthesis of deoxiribooligonucleotides - The use of hindered primary amines and a new isolation procedure, <i>Tetrahedron Lett.</i> , 23:5119-22 (1982).
	AL	Johnson, W.S., <i>et al.</i> , Studies in decarboxylation and lacto-enioc tautomerism. IV. ¹ Paraconic acids ² , <i>J. Amer. Chem. Soc.</i> , 72:935-39 (1950).
	AM	Kharasch, N., <i>et al.</i> , Derivatives of sulfenic acids. X. The reaction of 2,4-dinitrobenzenesulfenyl chloride with alcohols, <i>J. Amer. Chem. Soc.</i> , 75:2658-60 (1953).
X	AN	Köster, H., Chemische DNA-Synthesen, <i>Nachr. Chem. Techn. Lab.</i> 27:694-700 (1979). <i>not in English</i>
AP	AO	Köster, H., <i>et al.</i> , Some improvements of polymer oligodeoxynucleotide synthesis, <i>Natural Products Chemistry</i> , 9(14):227-37 (1984).
	AP	Leikauf, E., <i>et al.</i> , A combinatorial protecting group strategy for oligonucleotide synthesis, <i>Tetrahedron</i> , 52(20):6913-30 (1996).
	AQ	Leikauf, E., <i>et al.</i> , A new colorimetric protecting group allowing deprotection under neutral conditions, <i>Tetrahedron</i> , 51(19):5557-62 (1995).
	AR	Nielsen, P., Sequence-selective recognition of DNA by strand displacement with a thymine-substituted polyamide, <i>Science</i> , 254:1497 (1991).
	AS	Nielsen, P., <i>et al.</i> , Incorporation of (<i>R</i>)- and (<i>S</i>)-3',4'- <i>seco</i> -thymidine into oligodeoxynucleotides: hybridization properties and enzymatic stability, <i>Nucleic Acids Res.</i> , 22:703-10 (1994).
	AT	Ogilvie, K.K., The <i>tert</i> -butyldimethylsilyl group as a protecting group in deoxynucleosides, <i>Can. J. Chem.</i> , 51:3799-3807 (1973).
✓	AU	Paal, C., <i>et al.</i> , Über katalytische wirkungen kolloidaler metalle der platingruppe. VIII. Die stufenweise reduktion der phenyl-propionsäure, <i>Ber. Dtsch. Chem. Ges.</i> , 42:3930-39 (1909).
	AV	Pohl, H., <i>J. Prakt. Chem.</i> , 141:45-60 (1934).

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	APPLICANT Köster <i>et al.</i>	
	FILING DATE July 2, 1999	GROUP 1632 1627

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

PP	AW	Pon, R.T., <i>et al.</i> , Derivatization of controlled pore glass beads for solid phase oligonucleotide synthesis, <i>Biotechniques</i> , 6(8):768-770, 773-775 (1988).
	AX	Reese, C.B., <i>et al.</i> , Oximate ion promoted unblocking of oligonucleotide phosphotriester intermediates, <i>Tetrahedron Lett.</i> , 2727-30 (1978). [missing volume]
	AY	Reese, C. B., The chemical synthesis of oligo- and poly-nucleotides by the phosphotriester aproach, <i>Tetrahedron</i> , 34:3143-79 (1978).
	AZ	Rotermund, G.W., <i>Methoden der Organischen Chemie (Houben-Weyl)</i> , vol. IV/1b, Oxidation, part 2. Verlag, Georg Thieme, <i>Stuttgart</i> , pp. 176 (1975).
	BA	Scouten, W.H., <i>et al.</i> , Reversible immobilization of antibodies on magnetic beads, <i>Analytical Biochemistry</i> , 205:313-318 (1992).
	BB	Shabarova, Z., <i>et al.</i> , Table of contents, <i>Advanced Organic Chemistry of Nucleic Acids</i> , VCH Verlagsgesellschaft Weinheim, Germany (1994).
	BC	Sinha, N.D., <i>et al.</i> , β -cyanoethyl N,N-dialkylamino/N-morpholinomonochloro phosphoamidites, new phosphitylating agents facilitating ease of deprotection and work-up of synthesized oligonucleotides, <i>Tetrahedron Lett.</i> , 24:5843-46 (1983).
	BD	Sinha, N.D., <i>et al.</i> , Polymer support oligonucleotide synthesis XVIII ^{1,2} : use of β -cyanoethyl-N,N-dialkylamino-/N-morpholino phosphormidite of deoxynucleosides for the synthesis of DNA fragments simplifying deprotection and isolation of the final product, <i>Nucleic Acids Res.</i> , 12(11):4539-57 (1984).
	BE	Skita, A., <i>et al.</i> , Reduktions Katalysen, <i>Ber. Dtsch. Chem. Ges.</i> , 43:3393-99 (1910).
	BF	Sonveaux, E., Reviews/The organic chemistry underlying DNA synthesis, <i>Bioorg. Chem.</i> , 14:274-325 (1986).
	BG	Stengele, K.P., <i>et al.</i> , Improved synthesis of oligodeoxyribonucleotides, <i>Tetrahedron Lett.</i> , 31:2549-52 (1990).
	BH	Uhlmann, E., <i>et al.</i> , Antisense oligonucleotides: A new therapeutic principle, <i>Chem. Rev.</i> , 90:543-84 (1990).
	BI	Uznanski, B., <i>et al.</i> , Deoxyribonucleoside 3'-phosphordiamidites as substrates for solid supported synthesis of oligodeoxyribonucleotides and their phosphorothioate and DNA-triester analogues, <i>Tet. Lett.</i> , 28:3401-04 (1987).
✓	BJ	van Boom, J.H., <i>et al.</i> , Use of levulinic acid in the protection of oligonucleotides via the modified phosphotriester method: Synthesis of decaribonucleotide U-A-U-A-U-A-U-A-U-A, <i>Tetrahedron Lett.</i> , 4875-78 (1976). [missing volume]

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	APPLICANT Köster <i>et al.</i>	
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OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

pp	BK	Watkins, B.E., <i>et al.</i> , Synthesis of oligodeoxyribonucleotides using N-benzyloxycarbonyl-blocked nucleosides, <i>J. Am. Chem. Soc.</i> , 104:5702-08 (1982).
	BL	Weiler, <i>et al.</i> , High-loaded supports and the NPE/NPEOC-strategy: An efficient combination for large scale synthesis of oligonucleotides, <i>Solid Phase Synthesis & Combinatorial Libraries, Fourth International Symposium</i> , 12th-16th September, 1995, Edinburgh, Scotland, Mayflower Scientific Limited, Birmingham, 1996 (Editor: Roger Epton).
	BM	Werstiuk, E.S., <i>et al.</i> , Oligoribonucleotide synthesis. IV. ¹ Approach to block synthesis, <i>Can. J. Chem.</i> , 50:1283-91 (1972).
✓	BN	Database WPI, Derwent Publication #7144464, citing German Patent No. 3644346.

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